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(54) **System and method for content management assessment**

(57) A method for assessing content management includes identifying business critical information across processes and groups within the organization, identifying transactions between users within the organization which are associated with the business critical information; identifying major value chain processes within the organization for managing the business critical information and their associated transactions; analyzing the role and flow of the business critical information and their

associated transactions within the major value chain processes to develop a set of modifications to the major value chain processes for achieving an optimized flow; measuring the flow of the business critical information and their associated transactions to determine a baseline flow; and modifying the major value chain processes in accordance with the set of developed modifications and measuring the flow of the business critical information and their associated transactions until the optimized flow has been achieved.

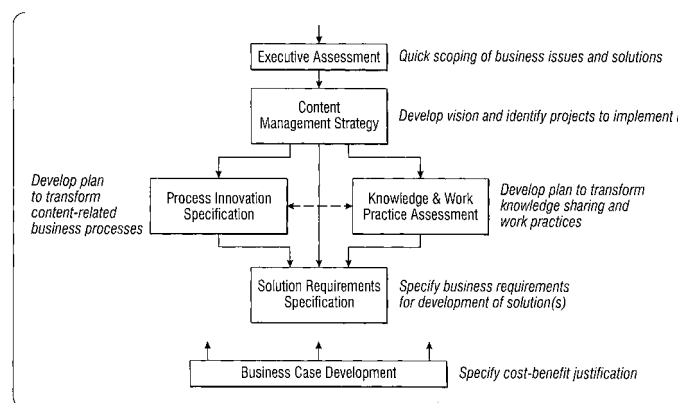


FIG. 1

DescriptionFIELD OF THE INVENTION

[0001] This invention relates generally to a system and method for content management assessment, and more particularly to a system and method which employs metrics across a broad spectrum of content types.

BACKGROUND OF THE INVENTION

[0002] Organizations depend on vast amounts of information to operate; indeed, organizations can be saturated with information. But information alone does not guarantee success. Information needs to be marshaled and organized for its intended purpose. Some of this information is embedded in document form on the web, on other digital media, or on paper (media-based). Other information can be more elusive; it is vested in people and acts as the foundation for their knowledge (knowledge-based).

[0003] Conventional information technologies provide software-based solutions, called document management, for managing certain types of information. Document management addresses the storage and recall of documents as objects. As a natural follow-on, "content" within documents, such as sentences, paragraphs, tables, and graphics, can also be managed. Content management involves managing internal objects and supports their dynamic reuse in different documents. However, conventional information technology (IT) systems often overlook information in files, manuals, web pages, reports, letters, etc. Conventional information technology also ignores unrecorded information.

[0004] An organization has to optimize its use of both media-based and knowledge-based resources to thrive and grow. An organization has to provide timely access to relevant information and knowledge, distributing it to the people who need it, re-using it whenever possible, realizing opportunities and removing overhead. An organization's value and future rely on the effective use and enhancement of its intellectual assets such as the knowledge of its people, the information available through them to and from customers and business partners. This means re-inventing and innovating business processes and changing work practices, often through the hiring of consultants and focusing on application areas such as Customer Relationship Management (CRM) or Enterprise Resource Planning (ERP).

[0005] An existing method for delivering content management related consultancy services is for each service consultant to rely on examples of his own previous work, and on haphazardly gathered examples of the work of other service consultants. Organizations need a system and method for managing content in order to change and improve their business by designing processes and building systems that organize and exploit this material. Organizations need a method for assessing content management which assesses all relevant information in an organization, both recorded and unrecorded.

SUMMARY OF THE INVENTION

[0006] A system and method for assessing content management, according to one aspect of the invention, includes identifying business critical information across processes and groups within the organization. Instead of focusing on specific application areas such as Customer Relationship Management or Enterprise Resource Planning, the system and method of the invention focus on information and knowledge content across processes and organizational groups within the organization. The system and method recognizes the fact that one group within an organization or one process within an organization may require information from other processes and organizations. Business critical information includes information stored in the form of web content, electronic documents, paper documents and digital media and also unrecorded information. Transactions between users within the organization which are associated with the business critical information are identified. Major value chain processes within the organization for managing the business critical information and their associated transactions are identified. The role and flow of the business critical information and their associated transactions within the major value chain processes across organizational groups within the organization are analyzed to develop a set of modifications to the major value chain processes for achieving an optimized flow. The flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization is measured to determine a baseline flow for the business critical information. The major value chain processes are modified in accordance with the set of developed modifications and the flow of the business critical information and their associated transactions through the modified major value chain processes is measured. This process is repeated until the optimized flow has been achieved.

[0007] The step of analyzing the role and flow of the business critical information and their associated transactions may include pinpointing problems in which business critical information, knowledge and processes combine to affect key business performance indicators. The step of analyzing the role and flow of the business critical information and their associated transactions may also include developing a set of metrics for measuring the flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups

within the organization.

[0008] The system and method may further include defining a particular business service (or component service) within the organization which uses business critical information in a defined way. Examples of particular business services include a content strategy for identifying and managing content-related initiatives across the organization; a knowledge and work practice assessment for identifying critical and competitive factors within the organization; a business case for developing a cost-benefit justification of a proposed content improvement initiative; a requirements analysis and specification for process innovation for the organization; and a requirements analysis and specification for solution development for the enterprise. Two or more of the business services may be combined or a customization provided for a particular customer.

[0009] An important tool used in the system and method for the various identification steps is a workbook with an ordered set of templates for gathering each of business critical information, associated transactions, and major value chain processes. A workbook may be defined for each of the component services. The workbook is a tool which has a baseline set of templates for use in each of the component services. The templates can be customized for a particular customer, organization, industry or other defined conditions. The templates can be used as a means for collecting and recording unrecorded knowledge within the organization. The templates can be completed by a consultant after observation of an organization's processes or used as an interview form to elicit information from members of the organization.

[0010] In accordance with another aspect of the invention a system for assessing content management within an organization, includes means for identifying business critical information across processes and groups within the organization, wherein business critical information comprises information stored in the form of web content, electronic documents, paper documents and digital media and unrecorded information; means for identifying transactions within the organization which are associated with the business critical information; identifying major value chain processes within the organization for managing the business critical information and their associated transactions; means for analyzing the role and flow of the business critical information and their associated transactions within the major value chain processes across organizational groups within the organization to develop a set of modifications to the major value chain processes for achieving an optimized flow; means for measuring the flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization to determine a baseline flow for the business critical information; and means for modifying the major value chain processes in accordance with the set of developed modifications and measuring the flow of the business critical information and their associated transactions through the modified major value chain processes until the optimized flow has been achieved.

[0011] A system and method for assessing content management (content management assessment or CMA) examines and analyzes the roles and flow of business critical information held in the form of web content, electronic documents, paper documents and other digital media/assets and knowledge assets within major value chain processes in the business. The system and method for CMA delivers metrics which provide a clear means for measuring a client's business information flows and their use. The system and method for CMA develops measurable goals for business improvement related to the management of information and the associated transactions between users of that information. The system and method for CMA can be used to provide customer deliverables: reports on findings, an assessment of strengths and weaknesses, metrics that assist in developing business cases for change, proposed changes to business processes, requirements specifications, an overall strategy and an action plan with key recommendations. The system and method for CMA enables the preparation of a detailed design and deployment of solutions, not only handling the technical aspects of systems integration, but also working with our clients to develop and implement change management programs, with hosting and managed service operations. The system and method for CMA solves the problem of sub-optimal management of content and information to support business objectives.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

FIG. 1 is a block diagram of a system for consult methodology assessment including five component services; FIG. 2 is a block diagram of a method of implementing a CMA; and FIG. 3 is a flow chart of the steps involved in the CMA Business Case component.

DETAILED DESCRIPTION

[0013] The system and method for CMA can be provided in six exemplary, discrete component services (see Figure 1). These can be delivered either as separately provided projects or, more usually, combined in a configuration unique to a specific customer's requirements. These six CMA service components examine the way knowledge and work

practices support business processes, propose changes to business processes, specify requirements for solutions, make a business case for change, and propose an overall strategy for a program of projects to implement these changes.

[0014] The Executive Assessment component service takes an overview of part or all of an organization and identifies areas where solving document, content and knowledge issues could provide major benefits. Executive Assessment gathers, analyses and validates information and develops the case for change, so that customer management can justify the next stage of the work necessary to develop and implement content and document related solutions.

[0015] The Content Strategy development component service is used to identify, prioritize and manage content-related initiatives - highlighting opportunities, summarizing benefits and planning project implementation. The Content Strategy service helps clients to identify and manage a program of content-related initiatives across their organization, including the business case, prioritization and implementation planning.

[0016] The Knowledge & Work Practice assessment component service is used for assessing knowledge flow and social capital, creating a basis for managing most critical competitive factors, developing a master concept and action plan to enable transformation for sustainable market success and competitive strength. The Knowledge & Work Practice Assessment component service produces a strategy and action plan to transform the organization's most critical and competitive factors: people's knowledge about clients and markets, social capital, capability for innovation and learning, knowledge processes, as well as partnering and networking.

[0017] The Business Case development component service calculates paybacks and benefits by reviewing the current situation and identifying performance gaps. Metrics are selected and solutions are identified in terms of business processes and technical components and a vision is developed of the future business context. The Business Case development component service takes a proposed content improvement initiative and develops a cost-benefit justification for it as a project, with a vision of how the preferred solution will work in a business context, risk management and an implementation plan.

[0018] The Process Innovation requirements component service analyzes and benchmarks business processes with their content flow, identify improvements, and make proposals for process for change with the anticipated measurable benefits. The master plan for business innovation forms the basis for action and feeds through directly to activities such as change enablement and management. The Requirements Analysis and Specification for Process Innovation (RASPI) component service identifies opportunities for process innovation and benefits including metrics to measure them, delivering an action plan for optimization, redesign and transformation.

[0019] The Solution Development requirements component service defines business and technical requirements, linking processes to functions within an overall solutions architecture. Together with the requirements for process innovation, this forms a basis for strategic outsourcing or for a development and integration project. The Requirements Analysis and Specification for Solution Development (RASSD) component service defines business and technical requirements for a new content management solution which create the base for process outsourcing, for an RFP or for an external/internal development and integration project.

[0020] Component services can be provided individually or in sequence. Alternatively a customer unique service can be created to meet unique customer requirements. Each component service may provide customer deliverables such as reports on findings, the assessment of strengths and weaknesses, metrics that assist in developing business cases for change, proposed changes to business processes, requirements specifications, an overall strategy and an action plan with key recommendations.

[0021] The CMA service focuses on delivering metrics which provide a clear means of measuring a client's business information flows and their use. It also develops measurable goals for business improvement related to the management of information and the associated transactions between users of that information.

[0022] The system and method for CMA provide several new features over prior methods. The CMA reviews the current state of and opportunities for improvement in Content Management at strategic, project or detailed operational process levels as required. Two or more of the CMA services can be used in a sequence to identify and specify successively more detailed solutions. The CMA focuses on information and knowledge content across processes and organizational groups, instead of focusing on specific application areas such as Customer Relationship Management or Enterprise Resource Planning. The CMA employs a modified version of the Six Sigma approach to business modification and applies it to business process improvement. The CMA is supported by and interfaces with an integrated suite of other methodologies for example, such as those provided by Xerox Corporation for Project Management, Systems Integration and Change Enablement. The CMA differs from traditional business consulting in that it investigates the applicability of collaborative commerce processes and technology, performs a knowledge management assessment of cultural behaviors and draws on behavioral science for establishing better work practices.

[0023] The system and method for Content Management Assessment may be implemented as a consultancy service which can operate at strategic, project or detailed operational process levels as required. The CMA provides a formal means of measuring and improving business performance by considering the management and transaction of business critical information which is held in the form of documents, email, web content, other types of digital media/assets, and

paper documents. It provides a structured program for evaluating the ways in which this business information and knowledge are utilized in support of key business processes, in whichever form the information is held.

[0024] An organization's value and future rely on the effective use and enhancement of its intellectual assets - the knowledge of its people, the information available through them to/from its customers and business partners. Content Management enables process innovation and change by managing and distributing information across multiple environments and media. The CMA identifies improvements in business process efficiency and effectiveness related to Content Management processes and their use throughout the entire business value chain. The CMA provides a formal means of measuring and improving business performance. A goal of the CMA is to reduce the risk and improve return on major client investments in the areas of, for example, CRM, ERP, SCM, Intellectual Capital & Property management and Product/Services Lifecycle management. The CMA achieves these goals by targeting the reduction of time to market for client product and services; shortening of lead-times; improvement in management of information assets; enhancement of market communications; improvement of knowledge sharing; development and application of risk management practices.

[0025] Figure 2 is a flow diagram of a method for CMA. After client engagement, business critical information is identified across processes and groups within the organization, wherein business critical information comprises information stored in the form of web content, electronic documents, paper documents and digital media and unrecorded information. Transactions among users within the organization which are associated with the business critical information and major value chain processes within the organization for managing the business critical information and their associated transactions are also identified. For example, if the customer desires a business case assessment, a workbook with templates specially designed for the business case is used to identify the business critical information, associated transactions and major value chain processes within the organization. Next the CMA analyzes the role and flow of the business critical information and their associated transactions within the major value chain processes across organizational groups within the organization to develop a set of modifications to the major value chain processes for achieving an optimized flow. The flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization is measured to determine a baseline flow for the business critical information. Modifications to the major value chain processes are suggested and made and the flow of the business critical information and their associated transactions through the modified major value chain processes is measured and the process repeated until the optimized flow has been achieved.

[0026] The system and method for CMA can address customer issues such as: Ineffective/inefficient use of information means; slower time to market; slower responses to customers; higher transaction costs; delayed decisions due to missing information; delayed business change due to content conversions between legacy systems; higher costs due to operating in silos; duplication of efforts due to information dispersion across many different systems and sources; regulatory conformance costs become higher. The system and method for CMA can provide customer benefits such as: identifying solutions and an action plan for: reducing time to market; faster and higher quality customer responses; lower transaction costs due to improved communication; more relevant, timely and accurate information; more repurposing of flexible content through inter-system communication; information sharing at lower cost; multi-sourced information personalized through a single access point; conformance information as a product of normal business processes.

[0027] CMA Business Case Component Example: A flow chart of the steps involved in the CMA Business Case component is shown in Figure 3. Some of the questions to be asked (which may be included in one or more templates in a workbook) and an outline of some of the questions and steps to be taken are:

[0028] A Business Case develops a cost-benefit justification for a content improvement initiative.

[0029] Obtain estimates of costs and benefits.

[0030] Which costs? Define the main cost elements of the solution.

[0031] Which solution? Define the features and implementation options.

[0032] Which features are required? Define the desired state.

[0033] What is the desired state? It's the solution to current issues.

[0034] What are the current issues? What do we use to measure them?

[0035] How will we know when they're fixed? What are the performance goals?

[0036] What is the performance gap between the current and desired states?

[0037] Which solution features are required to close the gap? Will they close it?

[0038] How will we measure the success of the solution? Achievement of which goals?

[0039] How will the solution change the way people work? What will it cost for training and rollout? Which implementation options, e.g., pilot, 'big bang', restricted scope?

[0040] What else needs to change to ensure its success?

[0041] Which benefits? Measure.

[0042] The current way of working and its costs.

[0043] The way of working using the new solution.

[0044] The difference in costs between the two, and revenue-generating benefits.

[0045] A CMA RASSD component applied to an exemplary professional services client may produce the following:

Client: Trade support agency and consultancy for international business relations.

Business Issues: Become first port of call for international business relations; transformation from a state-funded organization to leading edge consultancy.

Solution: Analyze and specify requirements and opportunities for knowledge management; specify requirements, layout and logical structure of new internet and intranet site; specify requirements, layout and logical structure for new yellow pages of expertise; analyze and specify integration with legacy systems.

Benefits: Created base for evaluation and selection of new knowledge sharing platform; specified requirements for new international yellow pages of expertise (expert brokering); defined new structure, organization, and processes for enterprise content and knowledge management; created base for successful implementation of new internet/intranet within 4 months; new internationally visited internet site increased traffic in the first weeks by 25%.

[0046] The system and method for CMA may adopt the Six Sigma methodology developed in the manufacturing community and modify it to measure and improve business performance in the area of information technologies and content management. Six Sigma is defined as the quality and business management initiative credited with taking millions of dollars of cost out of hundreds of corporations, while simultaneously improving the quality and customer satisfaction of those same corporations.

[0047] Six Sigma starts by aligning all levels of an organization to the goals established by the top leadership. Leaders are instructed on how they should set goals and how they should tie incentives to those goals. They also learn how to clearly identify measurements that serve as indicators of improvement in organizational processes as well as processes that deliver products or services directly to the customer. Once those measurements are clearly identified they are regularly monitored for improvements. Mid level management learns how to identify those areas that have poor quality, or "hidden costs" which are those costs that can't be broken down and traced to specific operations or are not made known to management, making higher quality more expensive. Once those areas are determined, the Six Sigma Methodology shows them how to work through the issues in bite size projects. Once the bite size projects are identified, project leaders at the process level of an organization, commonly called Black Belts and Green Belts, are assigned to follow a rigorous process designed to properly identify and fix the defective process steps. Defect reduction eliminates hidden processes and customer service issues. When Six Sigma is properly implemented costs will go down quickly thereby aligning back to the operational goals established by top leadership. Six Sigma is not about establishing a separate quality silo within a company or organization. It is about building quality into your existing structure.

[0048] Exemplary templates are attached hereto as Exhibit A. One exemplary way in which the system and method for content management assessment may be implemented is in a workflow process which employs a workbook. An exemplary workbook for implementing the Business Case component is attached hereto as Exhibit B.

[0049] The invention has been described with reference to particular embodiments for convenience only. Modifications and alterations will occur to others upon reading and understanding this specification taken together with the drawings. The embodiments are but examples, and various alternatives, modifications, variations or improvements may be made by those skilled in the art from this teaching which are intended to be encompassed by the following claims.

Exhibit A**Example Template: Goals and Measurements Plan**

5 Use one of these for each goal

[0050]

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Goal #	01	Goal Name	Processing 25% more claims per day
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#	Metrics - Current State	Metric Availability	Data Collection Method and Risks	Validation and Best Practice
1	Incoming Claims = 50 per day	Claims Reporting System (CRS)	Monthly output report from CRS	40-60 per day
2	Processed Claims = 40 per day	Claims Reporting System (CRS)	Monthly output report from CRS	30-40 per day
3				
4				
5	Incoming Claims = 50 per day	Claims Reporting System (CRS)	Monthly output report from CRS	40-60 per day
6	Processed Claims = 50 per day	Claims Reporting System (CRS)	Monthly output report from CRS	40-60 per day
7				
8				

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Schedule Number	Name
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[illegible]

C:	current	For instance, Cy + 1yA means that the records should be retained for the current calendar year plus another year then 2ryR means that the records should be kept for two rolling years then reviewed.
m:	month archived	
y:	calendar year	
ry:	rolling year	
A:	transfer to archive	
D:	destroy	
R:	review	

Example Template: Information types and sources

[0052] Consider three (or more) types of information that you frequently need. List them in the first column of the form below.

[0053] In the second column, fill in the best source for the answer you need.

Types of Information we need most often	Best ways to direct information request
1.	
2.	
3.	
	Options for directing information requests may be: <ul style="list-style-type: none"> • Contact a corporate information specialist • Send an email or voicemail to a distribution list

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(continued)

Types of Information we need most often	Best ways to direct information request
	<ul style="list-style-type: none"> • Send emails or voice mails to a few individuals • Post a general request where all members of the organisation will see it • Post a request where a specific group will see it

Example Template: Document Definition

[0054]

Document Name	Submission/Annual Report	
Document Owner	Client/Underwriter	
Current Media	Paper/Fax/Electronic/CD/Vide o	
Creation Process	Comments	Future State Issues
Sent to Underwriter by Client	Typically includes Client introduction, their description of their specifications, Loss Data, survey reports (which may be large separately bound documents)	Future improvement: Underwriters should encourage Clients to where possible to submit electronic Submissions i.e., Word documents, Excel spreadsheets as well as paper copies
Access and Update Activity	Comments	
Comments/highlights added to pertinent text	May be distributed for information/comment Scanned or photocopied documents lose color (maps, drawings particularly susceptible)	Original must be kept intact
Management and Retention	Comments	
Stored in Section NN in the Binder. Electronic version may be stored on M-drive or printed and filed.		Full Text Index would be useful

Example Template: Document Profile Survey

[0055]

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Document Number		Document Name	
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Description	
Objectives	
Document Owner	

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Attributes	Detail	Comments	Issues	Opportunity
ORIGIN				
How do you obtain/create this document: <ul style="list-style-type: none"> created electronically by you 				
<ul style="list-style-type: none"> received electronically/ physically from outside the organization? Where from? 				
<ul style="list-style-type: none"> received electronically/ physically from within the organization? Where from? 				
<ul style="list-style-type: none"> scanned in? By whom? 				
<ul style="list-style-type: none"> from a common repository? Electronic/ Physical? Where? 				
<ul style="list-style-type: none"> What is the process/trigger by which you obtain/create this document? 				
FREQUENCY				
Do you need this document regularly or exceptionally? If exceptionally, when?				
How often do you receive/create this document?				
How often do you work with this document?				
How often do you use/access this document?				
USE/ACCESS				

Attributes	Detail	Comments	Issues	Opportunity
How long does it take to obtain the document?				
How quickly would you need to retrieve it?				
Do you keep a copy of this document in your own filing or use/access it in the shared storage?				
How do you identify the relevant version/occurrence of the document? Is(are) your intervention(s) the last one(s) before the document becomes final or a step in its development?				
What use do you make of the document (several may apply, please give detail for each copy of the document if applicable)? For each, say if the action is on physical or electronic document, what triggers the action, and any time pressures/deadlines. • Browse only (for info)				
• Browse and use info as input to creating/modifying other documents				
• Cut & paste to other document(s)				
• Modify document itself				
• Annotate the document (review)				
• File (physically/electronically?)				
• Distribute/circulate • original • your amended version • original + comments				

Attributes	Detail	Comments	Issues	Opportunity
<ul style="list-style-type: none"> • Pass it on to next recipient 				
<ul style="list-style-type: none"> • Return to originator 				
<ul style="list-style-type: none"> • Expect document to be returned to you 				
<ul style="list-style-type: none"> • Other (authorize, summarize.) 				
Do you collaborate with other people when you are working on the document?				
How is the document indexed in your own filing? If different, how is it indexed in shared/remote storage?				
Is the document sensitive? In what way? (legal admissibility, regulatory implications, competitive or confidential information)				
Is access to this document restricted to a number of people? Who or which groups?				

	RETENTION				
5	How long should the version of the document you produce be kept for?				
10	If the version you produce is not the master/final version, how long should the master/final document be kept for?				
15	How many occurrences of the document do you keep at the desktop/own storage/shared storage? Physical and/or electronic? (e.g., 12 sets of monthly accounts)				
20	How much space is used at your physical desktop/own storage to store this document? (all occurrences and versions)				
25	If previous occurrence/version is needed, <ul style="list-style-type: none"> • where is it stored • how quickly is it needed • how often is it needed 				
30					
35					
40					
45					
50					
55					

	PHYSICAL				
5	Volumes				
	• Min / Max / Average size of the document				
	• Growth				
10	• Pattern (e.g., larger document at the end of month)				
	Media characteristics:				
	• Media type: paper, electronic				
15	• paper size (A4/A3), size of electronic file in Kbytes				
	• color / simplex / duplex				
20	• special features (bar codes, high resolution, graphics etc.)				
	BUSINESS CRITICALITY				
25	Do you rate this document as essential, useful or redundant to your own activity?				
	Has this document a different importance to different users?				
30	What are the Legal / regulatory requirements for this document?				
	PRODUCTION REQUIREMENTS				
35	Do you				
	• print the document in b/w				
	• print it in color				
40	• fax it				
	• copy it				
	• e-mail it				
	How is the document packaged				
45	• on its own				
	• with other documents				
	• physically bound				
	• electronically published				

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Example Template: Document Management Questionnaire

[0056]

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<< Project Name >>

Interview minutes

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Introduction

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Name(s)

Title / Function

Date of interview

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Interviewee department

Team, group of interviewees (if any)

Main business of interviewee's department

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Characteristics of the team

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Business relationships and professional
contacts with other teams, groups, in the
same organizational unit.

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Business relationships and professional
contacts with other organizational units.

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Main categories of documents

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Document	Scope & Purpose	Who creates it ?	Who uses it ?

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Study of document XXXX

Document characteristics

5 [0057]

	Average volume	
10	Can the document be split in modules?	<i>A module is a document unit that can be processed separately from the other parts of the document, or be used in several documents. Example: "slave" documents in the Microsoft Word Master and Sub- documents mechanism.</i>
15	Is the document created using a model	<i>for instance a Word model (.dot file)</i>
	Does the document contain graphics or photographs	
20	Is color used?	<i>The document can be simply black & white (if it has only text), or monochrome with continuous variations of gray intensity (if it has photographs), or it can have color graphics (with a little number of colors), or it can have color photographs (demanding a high level of realism)</i>
	What tool is used for document creation?	<i>Examples: Word, scanner, database application, manual creation....</i>
25	What tool is used for creating or acquiring graphics or photographs (if any)?	<i>e.g. : Photoshop, Illustrator, PowerPoint</i>
30	Does the document contain information from a non-documentary origin?	<i>example : data extracted from a database, results of calculation or simulations, ... These data were not created in the document, but introduced into the document after having been created by another tool. "Information" also includes graphical data An Excel sheet is regarded as a document</i>
35	If so, how is this information introduced into the document?	<i>Manual copy, "cut & paste" (with or without links), file sharing ?</i>
40	If so, does this information continue to change after being introduced into the document ? Is a synchronization mechanism required ?	<i>The information created in its original environment might be updated in this environment after inclusion into the document, which might make the document obsolete. The document might have to be updated....</i>

Study of document creation and validation process

[0058]

45	Who decides to create a new document	<i>e.g.: the author, a project leader, a manager ...</i>
	Is document creation part of a planning?	<i>Is there a planning document mentioning creation of this document as a task to be performed? Is there a date for that?</i>
50	What event causes the document creation?	<i>e.g.: a meeting, a decision, a completion of a technical or administrative or commercial task</i>
	What is the creation/reception frequency?	
55	<i>If the document is created by your organization (in or out of the team)</i>	
	Who writes the content of the document?	

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(continued)

5	Who inputs the content (if different)?	<i>e.g.: the author writes the document manually then a secretary enters it in Word</i>
	Is the same document written by several authors in parallel?	<i>e.g.: several specialists of different domain, each writing the part corresponding to his (her) specialty...</i>
10	Is the same document written by several authors sequentially?	<i>same idea, but at least one of the author needs the contribution of another author to perform his (her) own task, and has to wait for its completion....</i>
	<i>If the document is created outside your organization and received by your organization</i>	
	By what mean is the document transmitted	<i>e.g.: paper mail, electronic mail, fax...</i>
15	Is the document sent to a review group for comment?	<i>... a group that comments the document, checks its relevance or completion, and makes suggestions for improvement before the document is published</i>
	If so, is this group permanent?	<i>a different group might be formed for each new document....</i>
20	Are comments sent back to the author?	<i>another possibility is that someone else collects the readers suggestions and update the document, taking suggestions into account</i>
25	Is the document annotated? Is a comment sheet created?	<i>"Comment sheet" = document collecting the readers comments and suggestions, different from the original document</i>
	How many reading cycles are there?	<i>Is there an indefinite reading/modification loop ? Or one (two, three, ...) reading cycle only?</i>
30	Who validates this document? In how many steps?	<i>Are one or several persons entitled to approve the document? Are there several signatures? Is validation separate from approval?</i>

Study of the document management process

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[0059]

40	Who is allowed to know that the document exists?	<i>...the existence of very secret documents might be hidden to unauthorized users</i>
	Who is allowed to browse the document?	<i>...note: browsing is different from modifying</i>
	Who is allowed to modify the document after initial creation?	<i>the author is frequently the only person allowed to modify the document, but there might also be other authors</i>
45	Who is allowed to make a copy of the document?	<i>... this means generating a new reference for a new object in the document management system, with the same initial content</i>
	Who is allowed to annotate the document?	<i>...to add comments about the document without modifying its content</i>
50	Who is allowed to print the document?	<i>note: the printing might be charged to the user...</i>
	Do all these access rights vary within the document life cycle?	<i>Example : restricted consultation before the document is validated, then enlarged access after the document is validated ...</i>
55	Who is allowed to classify a document?	<i>Place the document into a folder or a cabinet where a community of users can retrieve it?</i>

(continued)

5	What are the document classification criteria or metadata?	<i>e.g.: subject, originator entity, type of document,... several criteria can exist simultaneously.</i>
	To be able to identify the document without having to read it, what information would be required?	<i>e.g.: title, author's name, subject, ...</i>
	What other information could be associated with the document?	<i>e.g.: identification number, date, version number, abstract, etc.</i>
10	Are there several versions of this document? If so, is it required that all the versions be stored?	
	How long must this document be stored, and why?	<i>What is the business reason for keeping this document 1) at all 2) for a specified length of time</i>
15	Is it required to keep the paper form of this document	<i>e.g.: for legal reasons</i>
20	Is the document related to other documents, through a relationship that could make a common management necessary?	<i>examples: document A is derived from document B (so if document B is modified, document A must be updated) - document A is a translation of document B - document A is a reply to document B....</i>

Study of the document distribution process

25 [0060]

	To whom is this document distributed?	
30	Is there a standard distribution list?	<i>... with names of people corresponding to a fixed profile, or even with the profile only (without names)</i>
	Is there a variable distribution list? If so, what causes the variations?	
35	What is this document used for by the recipients	<i>e.g.: decision, information, performance of a technical, administrative, commercial task, ...</i>
	Does the document undergo a process, with several steps and actors? If so, what are the steps?	
40	If so	Is the document transformed in this process? What are the transformations?
	If so	Is other information generated in this process?
	If so	Are software non documentary applications involved in this process?
45	If so	Do the document access rights vary in this process?

Study of the document search and retrieval process

50 [0061]

	What information associated with the document would improve retrieval (search criteria)?	<i>e.g.. title, subject, author's name, creation date...</i>
55	Is content-based (full-text) search relevant for this document?	<i>Retrieve all document containing a given phrase : e.g. "Quality assurance" near "Document management"...</i>
	Can this document be identified from a reference in another document?	<i>Is it possible to select this document by navigating in the whole documentation, using document references</i>

(continued)

Are there queries that should be repeated systematically, at specific times	<i>Each month (week, day, ...), retrieve all documents of a given origin, satisfying given criteria....</i>
---	---

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General requirements

[0062] Generally, do you believe that:

- 10
- ◆ Some useful documents are not transmitted to their intended readers, who need to search them or claim for them?
 - ◆ Conversely, distribution lists include recipients who do not need to see the distributed documents?
 - ◆ Documents are distributed, printed, copied, stored several times because of paper-based distribution and management?
 - ◆ Documents are lost and must be re-created (from printed version or from source information)?
- 15
- ◆ Non-validated or non-approved documents are used?
 - ◆ Non up-to-date documents are used?
 - ◆ Approved documents need to be rewritten to be understood by their intended readers?
 - ◆ Approved document with common topics are inconsistent?
 - ◆ Different readers have different interpretations of the scope and purpose of the same document?
- 20
- ◆ Business activities are delayed because of slow distribution of strategic documents?
 - ◆ Business activities need to be repeated because of document loss?
 - ◆ Inadequate decisions are taken because of lack of required documents?

[0063] What types of improvement would you request

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- ◆ In document processing activities?
- ◆ In document processing tools?

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Example Template: Process Analysis Questionnaire

[0064]

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<< Project Name >>

Interview minutes

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Introduction

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Name(s)

Title / Function

Date of interview

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Interviewee department

Team, group of interviewees (if any)

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Main business of interviewee's department

Characteristics of the team

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Business relationships and professional contacts with other teams, groups, in the same organizational unit.

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Business relationships and professional contacts with other organizational units.

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Process study

Listing of activities required for achieving business results

The starting point is the deliverables from the organizational entity whose processes are analyzed. It is assumed that one process results in a product or a service delivered to either an external or an internal customer.

For each item produced, the chain of activities that leads to the intended result is studied. The normal chain of activities is distinguished from exceptional chains of activities.

What are the main items (products, services) delivered by your organization entity ? List the results.

.....

.....

.....

.....

.....

(To be repeated for each deliverable within the scope of the process analysis)

- ♦ What activities (tasks) lead to the result ?

Result Product / Service	Activities (normal chain)
<< Result 1 >>
.....
.....
.....
.....
.....
<< Result 2 >>
.....
.....
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.....
<< Result 3 >>
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.....
.....
.....
.....

5	<< Result 4 >>

10
	<< Result 5 >>

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♦ What are the exceptions?

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Activity analysis

List of questions, to be asked for each activity in a given process
 (each activity is analyzed in turn ... in the following questions it is called *current activity*)

Launch conditions What event triggers the current activity?

.....

.....

.....

Is there a condition for launching the activity (which one)?

.....

.....

.....

Links with other activities

Does the current activity logically depend on performance of another activity (source) - within the same process or in a different process?

- ◆ In the same process (same intended result):

.....
.....

- ◆ In a different process (other intended result):

.....
.....

If there is a source activity:

- ◆ Does the source activity only need to be started, or does it need to be fully completed, before the current activity is started?

.....
.....

- ◆ If the source activity only needs to be started before the current activity, does it need to be completed before the current activity?

.....
.....

Does the current activity depend on the non-performance of another activity - within the same process or in a different process?

- ◆ In the same process (same intended result):

.....
.....

- ◆ In a different process (other intended result):

.....
.....

Is performance of another activity ("following activity") - either in the same process or in another process – dependent on performance of the current activity (or one of its sub-activities)?

- ◆ In the same process (same intended result):

.....
.....

- ◆ In a different process (other intended result):

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.....

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Is performance of another activity -either in the same process or in another process - dependent on non-performance of the current activity (or one of its sub-activities)?

♦ In the same process (same intended result):

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♦ In a different process (other intended result):

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What are the conditions of transition from the current activity to the following activity?

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If there are several possible following activities:

❶ are they mutually exclusive?

❷ what are the conditions of transition to each following activity?

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Performance variations

Is the current activity likely to be interrupted before it is fully completed? In which case?

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Does the person that is initially held responsible for performing the activity have the right:

♦ not to accept it?

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to delegate it to someone else?

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to perform it in cooperation with someone else?

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to postpone performance?

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Structure

Can current activity be split into sub-activities? Which ones?

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Standardization

Is current activity strictly standardized - i.e., does it have a fixed sequence of operations (\Rightarrow is it likely to be automated at some time)?

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Actors characteristics

What are the profiles required for performing the activity?

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♦ required knowledge and skills?

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♦ required professional experience?

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♦ required position in the organization?

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5	Sources of information	What information is required for performing the current activity? Where does this information come from? How is it stored (file, database, paper)? How do this information evolve/change - in particular in which activities?
10		
15		
20	Used Documents	Which documents need ("source documents") to be read for performing the current activity? What must be the level of completion of source documents ? What must be the level of validation of source documents ? In what form must source documents be transmitted?
25		
30		
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45		
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55		

Results

What documents are created as results of the current activity?

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Does performance of the current activity influence the state of an information object or a group of objects?

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Does it influence the status, validity, level of confidentiality of a document?

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Decisions:

- ◆ What decisions are likely to be taken following performance of the current activity?

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- ◆ About which objects, documents, data, are these decisions taken?

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- ◆ Are these decisions based on measurements, or do they require human appraisal?

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What are other results of the current activity?

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**Constraints and
completion criteria**

What constraints are associated with performance of the current activity?

- ◆ schedule constraints

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- ◆ duration constraints

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- ◆ costs constraints

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- ◆ qualitative constraints (consistency, quality)

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.....

What are the consequences of non-performance of the current activity:

- ◆ on other activities?

.....

.....

- ◆ on the project it is a part of (if any)?

.....

.....

What are consequences of non compliance with the constraints?

What are main criteria for evaluating correct completion of current activity? If there are several criteria, which one is the most important?

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Follow up

From what elements can the execution of current activity be verified (traceability, project follow-up, quality indicators, ...)

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From what elements is planning performed?

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Claims

1. A system for assessing content management within an organization, comprising:

means for identifying business critical information across processes and groups within the organization, where-
in business critical information comprises information stored in the form of web content, electronic documents,
paper documents and digital media and unrecorded information;

means for identifying transactions between users within the organization which are associated with the busi-

ness critical information;

means for identifying major value chain processes within the organization for managing the business critical information and their associated transactions;

means for analyzing the role and flow of the business critical information and their associated transactions within the major value chain processes across organizational groups within the organization to develop a set of modifications to the major value chain processes for achieving an optimized flow;

means for measuring the flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization to determine a base-line flow for the business critical information; and

means for modifying the major value chain processes in accordance with the set of developed modifications and measuring the flow of the business critical information and their associated transactions through the modified major value chain processes until the optimized flow has been achieved.

2. The system of claim 1, further comprising: means for recording the identified unrecorded information.

3. The system of claim 1, wherein the means for analyzing the role and flow of the business critical information and their associated transactions includes means for pinpointing problems in which business critical information, knowledge and processed combine to affect key business performance indicators.

4. The system of claim 1, wherein the identifying means comprises means for using a workbook with an ordered set of templates for gathering each of business critical information, associated transactions, and major value chain processes.

5. The system of claim 1, wherein the wherein the means for analyzing the role and flow of the business critical information and their associated transactions includes means for developing a set of metrics for measuring the flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization.

6. The system of claim 1, further comprising means for defining a business service within the organization which uses business critical information in a defined way.

7. The system of claim 6, wherein the means for defining the business service step comprises means for defining an executive assessment for identifying areas within the organization where solving document, content and knowledge issues could provide major benefits..

8. The system of claim 6, wherein the means for defining the business service comprises means for defining a content strategy for identifying and managing content-related initiatives across the organization.

9. The system of claim 6, wherein the means for defining the business service comprises means for defining a knowledge and work practice assessment for identifying critical and competitive factors within the organization.

10. The system of claim 6, wherein the means for defining the business service comprises means for defining a business case for developing a cost-benefit justification of a proposed content improvement initiative.

11. The system of claim 6, wherein the means for defining the business service comprises means for defining a requirements analysis and specification for process innovation for the organization.

12. The system of claim 6, wherein the means for defining the business service comprises means for defining requirements analysis and specification for solution development for the enterprise.

13. The system of claim 6, wherein the means for defining the business service comprises means for defining two or more of the following for the business: a content strategy, a knowledge and work practice assessment, a business case, a requirements analysis and specification for process innovation and a requirements analysis and specification for solution development.

14. A system for assessing content management within an organization, comprising:

means for identifying business critical information across processes and groups within the organization, where-

in business critical information comprises information stored in the form of web content, electronic documents, paper documents and digital media and unrecorded information;
means for identifying transactions within the organization which are associated with the business critical information;

5 identifying major value chain processes within the organization for managing the business critical information and their associated transactions;

means for analyzing the role and flow of the business critical information and their associated transactions within the major value chain processes across organizational groups within the organization to develop a set of modifications to the major value chain processes for achieving an optimized flow;

10 means for measuring the flow of the business critical information and their associated transactions through the major value chain processes across the organizational groups within the organization to determine a base-line flow for the business critical information; and

means for modifying the major value chain processes in accordance with the set of developed modifications and measuring the flow of the business critical information and their associated transactions through the modified major value chain processes until the optimized flow has been achieved.

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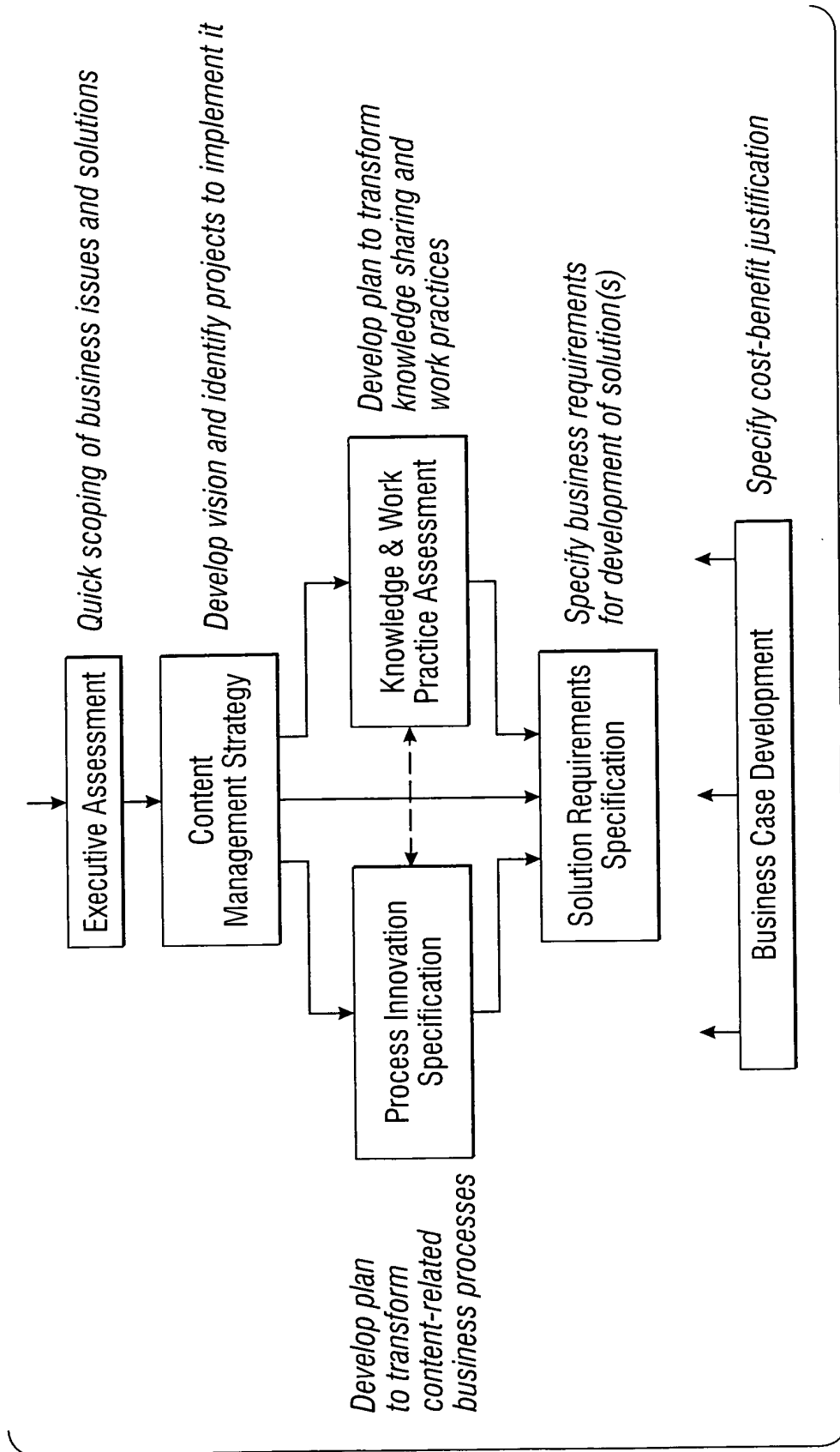


FIG. 1

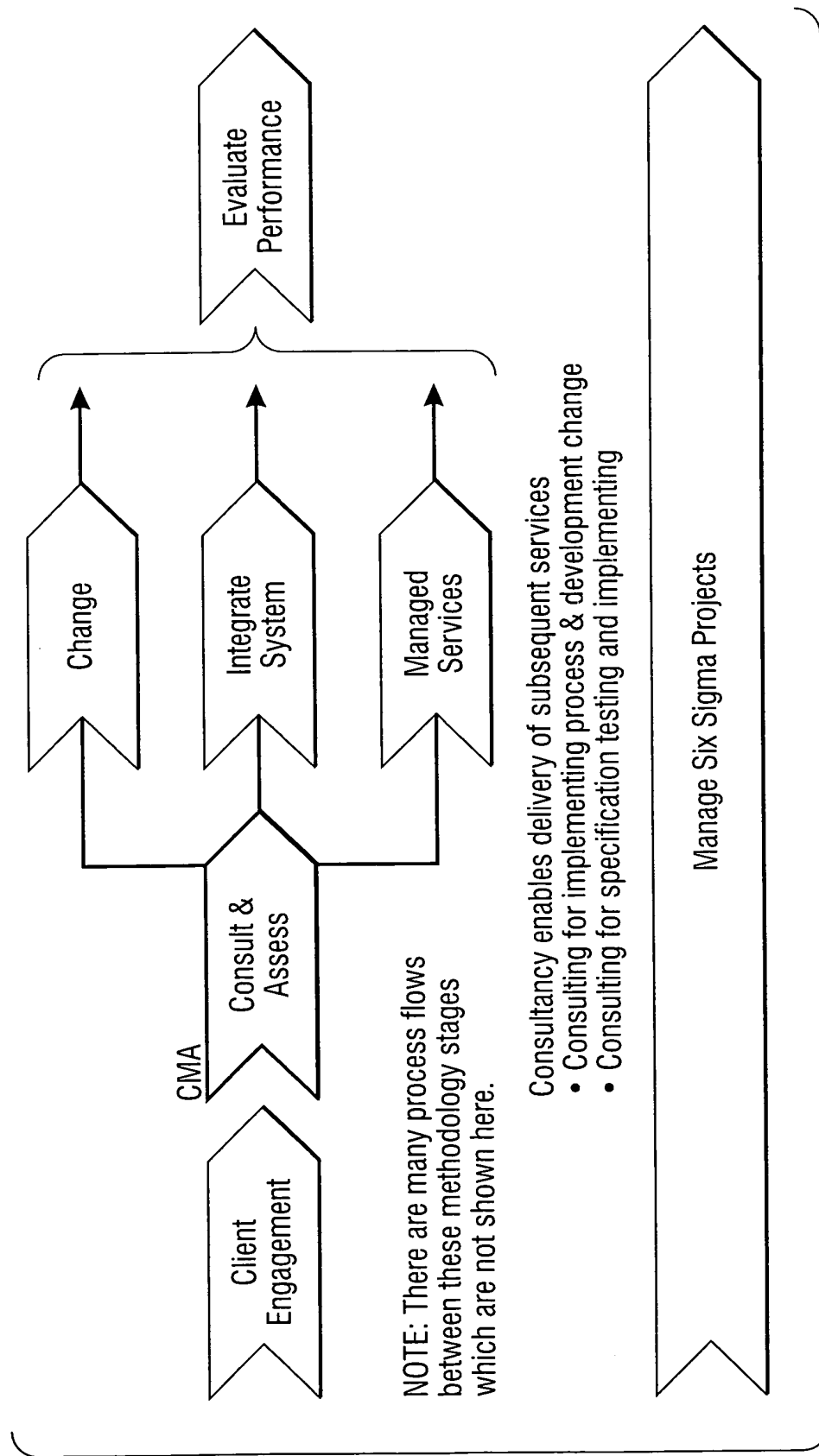


FIG. 2

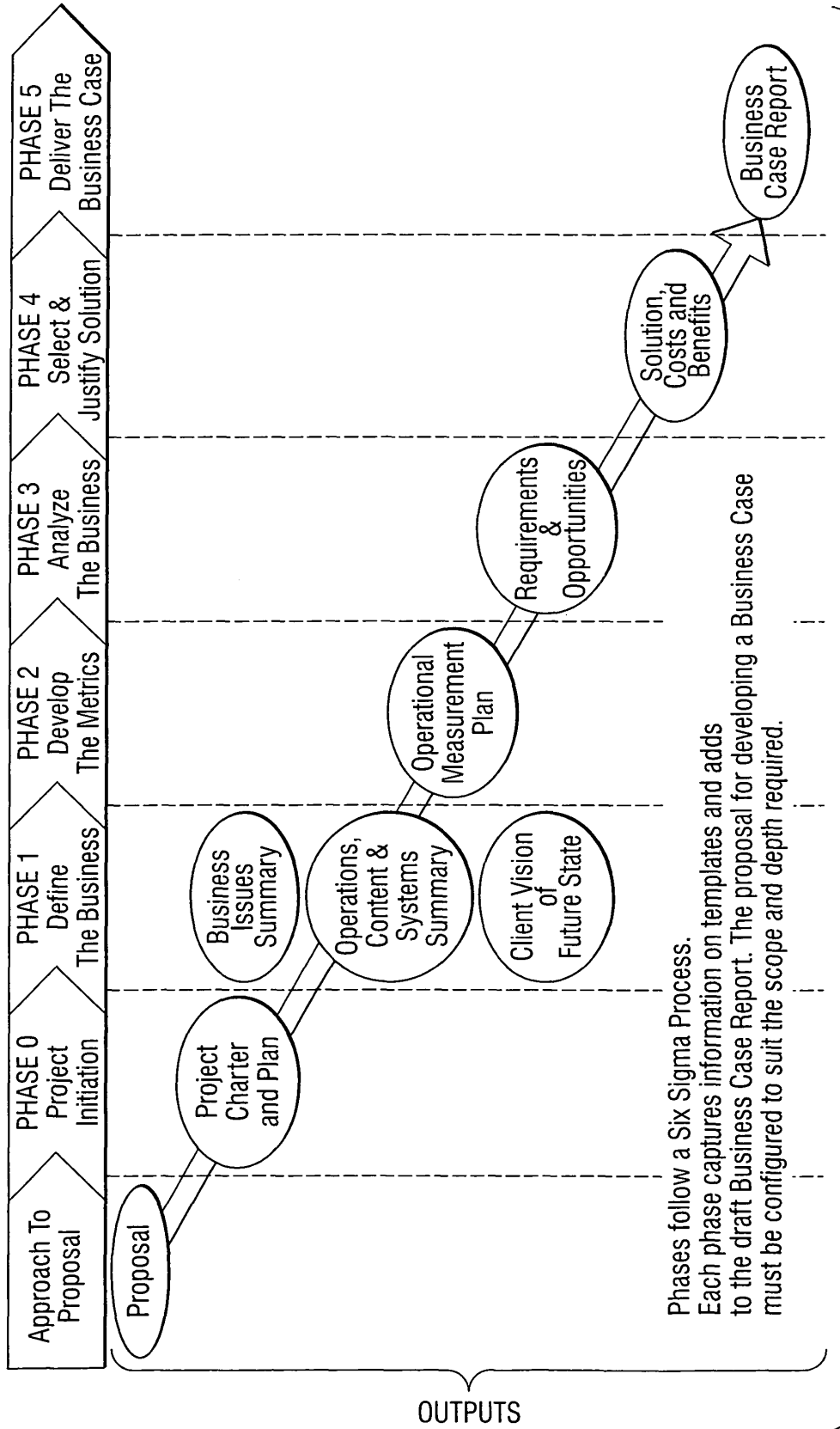


FIG. 3



European Patent
Office

DECLARATION

Application Number

which under Rule 45 of the European Patent Convention EP 03 02 3123 shall be considered, for the purposes of subsequent proceedings, as the European search report

The Search Division considers that the present application, does not comply with the provisions of the EPC to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of all claims

Reason:

The claims relate to subject-matter excluded from patentability under Article 52(2) and (3) EPC. Given that the claims are formulated in terms of such subject matter or merely specify commonplace features relating to its technological implementation, the search examiner could not establish any technical problem which might potentially have required an inventive step to overcome. Hence it was not possible to carry out a meaningful search into the state of the art (Rule 45 EPC; see also Guidelines for Examination in the EPO, Part B, Chapter VIII, 1-6).

The applicant's attention is drawn to the fact that a search may be carried out during examination following a declaration of no search under Rule 45 EPC, should the problems which led to the declaration being issued be overcome (see EPC Guideline C-VI, 8.5).

CLASSIFICATION OF THE APPLICATION (Int.Cl.7)

G06F17/60

EPO FORM 1504 (P04C37)

Place of search

MUNICH

Date

25 February 2004

Examiner

Hopper, E